



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,260	09/08/2003	Toshiyuki Tabu	32011-192720	8603
26694	7590	10/16/2007		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER VIANA DI PRISCO, GERMAN	
			ART UNIT	PAPER NUMBER
			2619	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,260

Applicant(s)

TABU, TOSHIYUKI

Examiner

German Viana Di Prisco

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 08/01/2007. These drawings are accepted.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salim (United States Patent No.: 6,628,653 B1) in view of Moriwaki et al (United States Patent Application Publication No.: 2003/0002506 A1) and further modified by Shirakawa et al (United States Patent Application Publication No.: US 2005/0086353 A1).

Art Unit: 2619

Consider claim 1, Salim shows and discloses routing processing device (figure 14 and column 15, line 42 – column 16, line 67) which identifies one or a plurality of types of packet formats (column 4, lines 24-28), and performs routing processing for each packet type, comprising: a packet information extraction portion, which extracts from a packet for identification a prescribed range of fields including at least one identifying information item which identifies the packet type (programmable discriminator 200 selects bits from particular sections of the packet)(figure 2 and column 6, lines 55-59) ; a packet judgment portion, which judges the packet type based on information in among said extracted fields (comparator 440 in figure 4, column 2, lines 41-48, column 4, lines 24-28 and column 8, line 62 – column 9, line 34); a packet sorting portion which sorts packets based on said header information imparted to the packets (packet handler 240 in figure 2); and, a routing processing portion which performs routing processing of packets sorted by said packet sorting portion, according to the packet type(figure 14 and column 15, line 42 – column 16, line 67).

However Salim fails to teach a header-imparting portion, which creates header information according to the packet type based on the judgment result of said packet judgment portion and imparts the header information to the packet.

In the same field of endeavor, Moriwaki et al. shows and discloses an internal header generator 236 (figure 4) and an internal header depending on the packet type (paragraph [077])

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a header depending on the packet type as disclosed by Moriwaki et al. in the device of Salim with the purpose of controlling the flow of packets.

Even though Salim as modified by Moriwaki et al discloses packet judgment portion, which judges the packet type based on information in a particular section of the packet, Salim as modified by Moriwaki does not explicitly disclose that the information is in a prescribed position in the packet.

In the same field of endeavor, Shirakawa et al disclose extracting and judging the packet type based on information in a prescribed position among the extracted fields (header) (paragraph [0041]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to judge the packet type based on information in a prescribed position among the extracted fields as disclosed by Shirakawa et al in the device of Salim as modified by Moriwaki et al in order to appropriately process data packets.

Consider claim 2, and as applied to claim 1 above, Salim as modified by Moriwaki et al and further modified by Shirakawa et al show and disclose a settings table 230 which associates packet types with said routing processing portion, and wherein said header imparting portion creates a packet header information designating said routing processing portion, based on the judgment result of the packet by said

packet judgment portion and said settings table and imparts this packet header information to the packet (figure 14 and column 15, line 42 – column 16, line 5).

Consider claim 4 and as applied to claim 1 above, Salim as modified by Moriwaki et al and further modified by Shirakawa et al disclose a programmable hardware discriminator for receiving incoming packets and selecting bits from any part of the incoming packets (column 2, lines 7-9).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salim (United States Patent No.: 6,628,653 B1) in view of Moriwaki et al. (United States Patent Application Publication No.: 2003/0002506 A1) and Shirakawa et al (United States Patent Application Publication No.: US 2005/0086353 A1), and further in view of Mizuhara et al. (United States Patent Application Publication No.: 2002/0012348 A1).

Consider claim 3 and as applied to claim 1 above, Salim as modified by Moriwaki et al disclose the claimed invention except the header containing discarding instruction information.

In the same field of endeavor, Mizuhara et al disclose a router device wherein an internal header is added to a packet containing discarding information (paragraph [0025]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add discarding information to the header as

disclosed by Mizuhara et al. in the device of Salim as modified by Moriwaki et al. with the purpose of controlling the flow of packets.

6. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Salim (United States Patent No.: 6,628,653 B1) in view of Shirakawa et al (United States Patent Application Publication No.: US 2005/0086353 A1).

Consider claim 5, Salim discloses a packet type identification device, which identifies one or a plurality of types of packet formats, comprising: a packet information extraction portion which extracts from a packet for identification a prescribed range of fields including at least one identifying information item which identifies the packet type (programmable discriminator 200 selects bits from particular sections of the packet)(figure 2, column 4, lines 24-28 and column 6, lines 55-59); and a packet judgment portion (comparator 440 in figure 4), which judges the packet type based on information among said extracted fields (column 4, lines 24-28).

Even though Salim discloses a packet judgment portion, which judges the packet type based on information in a particular section of the packet, Salim does not explicitly disclose that the information is in a prescribed position in the packet.

In the same field of endeavor, Shirakawa et al disclose extracting and judging the packet type based on information in a prescribed position among the extracted fields (header) (paragraph [0041]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to judge the packet type based on information in a

Art Unit: 2619

prescribed position among the extracted fields as disclosed by Shirakawa et al in the device of Salim in order to appropriately identify data packets.

Response to Arguments

7. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new grounds of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yazaki et al (United States Patent Application Publication No.: 2006/0114924 A1) disclose a packet forwarding apparatus with packet controlling functions wherein an internal header is added to the input packet. Onishi et al. (United States Patent No.: 5,434,863) disclose a routing accelerator that discriminates the kind of data frame

9. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Art Unit: 2619

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Viana Di Prisco whose telephone number is (571) 270-1781. The examiner can normally be reached on Monday through Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

German Viana Di Prisco
October 3, 2007



KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER

Application/Control Number: 10/656,260

Page 9

Art Unit: 2619